INFORMATION CONCERNING

Some of the Principal Navies

OF THE WORLD

A SERIES OF TABLES COMPILED TO ANSWER POPULAR INQUIRY



Office of Naval Intelligence April, 1911

GOVERNMENT PRINTING OFFICE WASHINGTON
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PREFACE.

The Navy Department is so frequently in receipt of letters from all parts of the country requesting information for debating societies, journals, and periodicals, as well as individuals, concerning the relative strengths of the principal naval powers, the types of vessels building or built, and facts concerning the type of battleship popularly known as *Dreadnought*, that it has directed the Office of Naval Intelligence to prepare tables which will substantially make reply to the greater part of such letters.

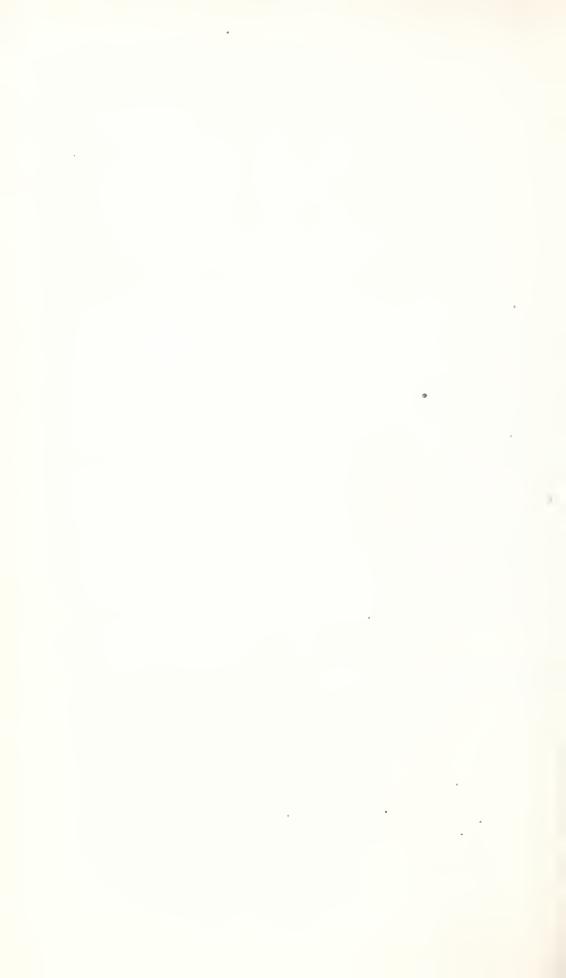
Under these instructions the Office of Naval Intelligence has compiled the following tables from such data as may have been made public in the several countries enumerated therein; and while these tables may be regarded as substantially correct, it is possible that inaccuracies may occur, for the reason that few countries beside the United States publish all the data concerning their fighting strength.

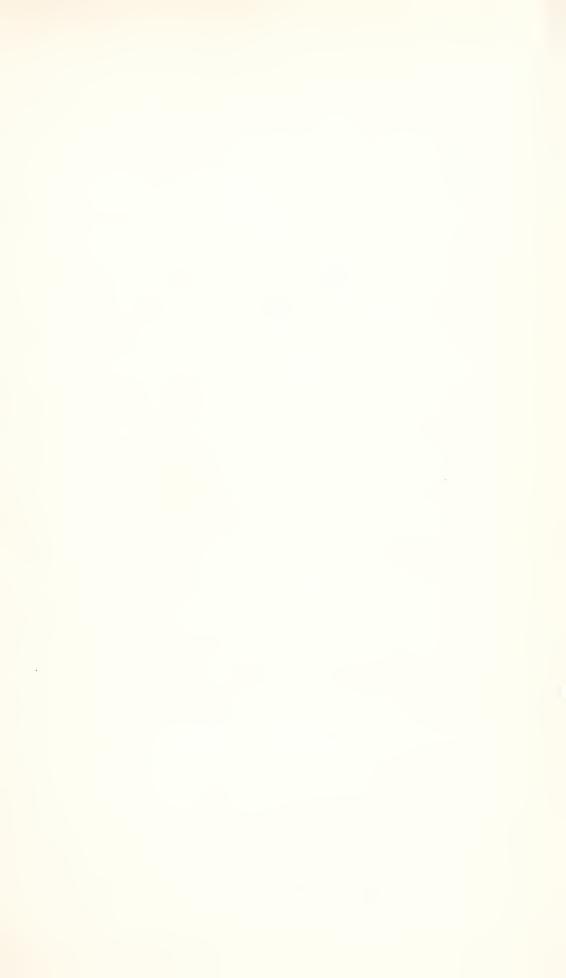
Tables I, II, III, IV, and V were compiled March 1, 1911, and are here reproduced, as they remain substantially correct and are sufficiently accurate for the purpose of this publication.

Т. М. Роття,

Captain, U.S. Navy, Chief Intelligence Officer.

Office of Naval Intelligence Navy Department, April, 1911.





Type, I.

WARSHIP TONNAUE OF THE PRINCIPAL NAVAL POWERS. NUMBER AND DISPLACEMENT OF WARRIES, BUILT AND BUILDING, OF 1,000 OR MORE TONS, AND OF TORPEDO CRAFT OF MORE THAN SO TONS.

					[Dec. 1, D11]				
	PREAT.	RITAIN	GERMANY.	UNITED STATES	FRANCE	CATAL	groups.	PAL)	W. Chillie
TYPE OF VESSEL	Bull.	Balkling	Hellt. Building.	Built, Building.	Built. Hullding.	Puik Building	Bulle Bullding.	Hulli Building.	Built Politag
. —	Num ber, Tous	Num- ber Tons Number	Tone Sum- ber, Tone.	Num- ber Tons Num- ber Tons	her, loss ber tons	Num- Toto Num- Tous	Number Tone Number Tone	Numi 1605 Numi Tota N	Sum- bor, Tone, Num- ber, Tax
Battleships (Orendonoghi type) Battleships (for clear) Battleships (for clear) Battleships (for clear) Battleships (for clear) Armard cruleser (Tavacible type) Armard cruleser, Battleships (for the clear) Battleships (for the	12 236,332 42 617,50 5 95,85 34 406,85 42 200,47 23 43,49 107,10 10,10	*4 90,800 *10 50,040 2 	0 55,414 12 9,000	25 331,146	20 2×6, 003	13 101,694 2 9,484 2 20,285 4 110,188 11 18,989 2 11,130 8 30,303 1 £5,488 5 9,158	9 122, 250 2 10, 380 9 ,	8 85,700	6 74,613 4 15,00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total tone built and total tone lentiding	65 30,737	* \$7 13, 610 1	2 3,790	28 4,502	· 200 19,166 5 66 22,384 15 9,192	50 5,000 10 1,726 1 85	20 3,722 0 31 6,648 8 4,800	16 7,711 28 3.140 3 1,822 11 J.590	43 0,810 12 2,61 6 1,646 6 1,61
Telai (one built and building.	1,896,11	428, 430	149,700	757, 711 . 127, 330	5 . 630,705 110,720	421,369 168 76	0 297,819 176,060	203, H12 [ns, 310	167, 624 18.16
- Dankeller.	2,	1:9	1,067,350	NSS, 054	741, 425	790, 110	47.5, 87P	112, 122	267, 442

battlet/pe taying a main battery of all big gaz. If bithes or more in malley). Battledige, first close, are those of calcut) his re were tone deplacement.

Armored entirers Las ship pains of the goal values

expense of carrying level game to make ballery at climitery and expedient taking their place in line of faithe with the Intilleables. They have an increase of speed at the

a All unarmored warnings of more than 150 0 km.

twich here been secrified to secure express specin the table, classed according to displacement an employee. Scotte are considered as smilers to which butters and pre-

^{20171-12. (}To face page 5).

TABLE II.

RELATIVE ORDER OF WARSHIP TONNAGE.

[March 1, 1911.]

At present.		As would be the case were ves now completed.	sels building
Nation.	Tonnage.	Nation.	Tonnage.
Great Britain	1, 841, 762	Great Britain	2, 278, 642
United States	712,767	Germany	965,045
Germany	667, 295	United States	849, 501
France	552,656	France	726, 411
Japan	433,091	Japan	522,571
Russia	305, 713	Russia	401, 463
Italy	219, 959	Italy	328, 289
Austria.	153, 938	Austria	209, 899

TABLE III.

PERSONNEL.

[March 1, 1911.]

Rank.	England.	France.	Germany.	Japan.	United States.
Admirals of the fleet	4		2	1	(1)
Admirals	12		5	5	
Vice admirals	22	15	11	23	
Rear admirals	55	30	19	33	² 26
Captains and commanders	627	340	297	271	197
Other line officers	2,321	1,509	1,596	1,591	1,053
Midshipmen at sea	450	54	398	182	277
Engineer officers	969	505	433	576	
Medical officers	593	³ 416	286	4 341	313
Pay officers	667	216	230	302	200
Chaplains	139				23
Warrant officers	2, 238	⁵ 2, 098	2,452	1, 138	659
Enlisted men	101, 985	50, 762	52, 824	42,042	47, 500
Marine officers	449		50		334
Enlisted men (marines)	⁶ 19, 983		1, 363		9, 521
Total	130, 514	55, 945	59, 966	46, 505	60, 103

¹ The Admiral of the Navy.

² The United States has now, temporarily, as extra numbers, due to promotion for war service, 8 flag officers, 12 captains, 5 commanders, 9 licutenant commanders, and 4 licutenants.

³ Includes pharmacists and apothecaries.

Includes 20 pharmaceutical officers.

⁵ Includes adjutants, maitres, and premier maitres of all branches.

⁵ Includes 3,120 men of coast guard.

TABLE IV.

VESSELS BUILT.

[March 1, 1911.]

	Battleships. Dread- nought type. ¹	Battleships. ²	Armored cruisers, Invincible type. ³	Armored cruisers.	Gruisers.4	Destroyers.	Torpedo boats.	Submarines.	Coast-defense ves- sels. ⁶
England	8	47	4	34	6 81	⁶ 176	59	68	
Germany	4	22	1	9	41	93	27	8	6
United States	4	25		12	. 30	30	28	18	5
France		17		21	12	65	225	60	3
Japan		13	2	11	16	57	59	9	3
Russia		9		7	11	97	45	31	2
Italy		9		10	7	23	58	7	
Austria		5		3	6	14	47	6	6

¹ Battleships having a main battery of all big guns (11 inches or more in caliber).

² Battleships, first class, are those of (about) 10,000 tons or more displacement.

³ Armored cruisers having guns of largest caliber in main battery and capable of taking their place in line of battle with the battleships. They have an increase of speed at the expense of carrying fewer guns in main battery, and a decrease in armor protection; also called battleship cruisers.

⁴ Includes all unarmored cruising vessels above 1,000 tons displacement.

⁵ Includes smaller battleships and monitors. No more vessels of this class are being proposed or built by the great powers.

⁶ Includes vessels of colonies.

TABLE V.

VESSELS BUILDING OR AUTHORIZED.

[March 1, 1911.]

	Battleships. Dread- nought type.	Battleships.	Armored cruisers, Invincible type.	Armored cruisers.	Cruisers.	Destroyers.	Torpedo boats.	Submarines.
England 1	10		² 5		² 16	² 39		² 18
Germany ³	9		3		4	16		⁴ 12
United States	6					12		16
France	2	5		1		20	2	28
Japan ⁵	2		1		5	4		4
Russia	4					3		2
Italy	4				3	10	50	13
Austria	62	1						6

¹ England has no continuing shipbuilding policy, but usually lays down each year 5 armored ships, with a proportional number of smaller vessels.

Note.—The following vessels are not included in the tables: Those over 20 years old, unless they have been reconstructed and rearmed since 1900; transports, colliers, repair ships, converted merchant vessels, or any other auxiliaries; vessels of less than 1,000 tons, except torpedo craft; torpedo craft of less than 50 tons.

Table V includes vessels authorized but not yet laid down, as well as those actually under construction.

² Includes vessels of colonies.

³ Germany has a continuing shipbuilding program, governed by a fleet law authorized by the Reichstag. For 1911 there are authorized 3 battleships, 1 armored cruiser, 2 cruisers, 12 destroyers. Eventual strength to consist of 38 battleships, 20 armored cruisers, 38 cruisers, 144 destroyers.

^{4 \$3,570,000} authorized for experiments and further construction.

⁵ One more battleship, 2 more armored cruisers, 1 more cruiser, and several destroyers and submarines authorized to be laid down and completed by 1916.

⁶ Building under agreement with navy department before authorization by Delegations.

Table VI.

BATTLESHIPS AND ARMORED CRUISERS PRIOR TO THE DREADNOUGHT TYPE.

[January 1, 1911.]

GREAT BRITAIN.

		GREA	AT BRITA	IN.						
		Built	, ,		Building.					
	Num- ber.	Tons.	Guns, 8-inch and larger.	Num- ber.	Tons.	Guns, 8-inch and larger.	Authorized.			
BattleshipsArmored cruisers		714, 750 406, 800	$\begin{cases} 32 \ 13^{\prime\prime}.5 \\ 152 \ 12^{\prime\prime} \\ 12 \ 10^{\prime\prime} \\ 52 \ 9^{\prime\prime}.2 \\ 68 \ 9^{\prime\prime}.2 \end{cases}$	}						
		G	ERMANY.							
										
Battleships	22	262, 616	$\begin{cases} 52 & 11'' \\ 40 & 9''.5 \end{cases}$	}	• • • • • • •					
Armored cruisers	9	94,245	6 9".5 44 8".3	}	• • • • • •					
	1	UNIT	ED STAT	ES.		1				
Battleships	25	334, 146	$\begin{cases} 32 \ 13'' \\ 68 \ 12'' \\ 144 \ 8'' \\ 16 \ 10'' \\ 36 \ 8'' \end{cases}$	}	• • • • • •					
Armored cruisers	12	157, 445	$\begin{cases} 16 \ 10'' \\ 36 \ 8'' \end{cases}$	}	• • • • • • •		· · · · · ·			
85992—11—	2		(9))				

Table VI—Continued.

BATTLESHIPS AND ARMORED CRUISERS PRIOR TO THE DREADNOUGHT TYPE—Continued.

FRANCE.

		Built	t.		Ві	uilding.	
	Num- ber.	Tons.	Guns, 8-inch and larger.	Num- ber.	Tons.	Guns, 8-inch and larger.	$egin{array}{c} ext{Author} \ ext{ized} . \end{array}$
Battleships			$ \begin{cases} 3 & 13''.4 \\ 50 & 12'' \\ 10 & 10''.8 \end{cases} $ (1)			(1)	
			JAPAN.				
Battleships	11	152, 548	36 12" 6 8"	}			
Armored cruisers	9	81, 400	$ \begin{cases} 36 & 12'' \\ 6 & 8'' \\ 32 & 8'' \\ 1 & 10'' \end{cases} $	}			
			ITALY.			1	1
Battleships	9	109, 000	$ \begin{cases} 4 & 13''.5 \\ 16 & 12'' \\ 8 & 10'' \\ 56 & 8'' \\ 4 & 19 & 10'' \\ 6 & 8'' \end{cases} $	}			
Armored cruisers	10	78, 520	$ \begin{cases} 19 & 10'' \\ 6 & 8'' \end{cases} $	}	•		

¹7.6-inch, largest caliber carried.

TABLE VII.

DREADNOUGHT TYPE OF BATTLESHIPS, WITH CONTEMPORARIES OF OVER 18,000 TONS DISPLACEMENT, AND ARMORED CRUISERS OF INVINCIBLE TYPE.

GREAT BRITAIN.

		Built.				Buildir	ng.		Number author-	
	Num- ber.	Tons.	Guns.		Num- ber.	Tons.	Guns.		ized up to January, 1911, but not yet building.	
Battleships	. 8	151, 350		12′′	10	226, 500	$\begin{cases} 20 \\ 80 \end{cases}$	12'' 13''.5	}	
Armored cruisers.	4	70, 500	32	12′′		• • • • • • •				
			GER	RMAN	Υ.			_		
Battleships	4	74, 408	48	11′′	1 9	193, 500	108	12"		
Armored cruisers.	1	19,000	8	11′′	3	66, 000	24	12"		
		UNI	TEI	D STA	TES.					
Battleships Armored cruisers.	1 (36	12"	5	122, 650	$\begin{cases} 44\\10\\\ldots \end{cases}$	12" 14"		
			FR	ANCE		-			w) A	
Battleships		18, 030	$\begin{cases} 4\\12 \end{cases}$	12'' 9''.4	} 7	136, 334	$\begin{cases} 44 \\ 60 \end{cases}$	12" 9".4	}	
Affiliated cruisers.		- • - • • • - • -					h)			
			$\mathbf{J}A$	APAN.			. **			
Battleships	2	39, 150	$\begin{cases} 8\\ 24 \end{cases}$	12'' 10''	2	41, 600	24	12′′		
Armored cruisers.	4	56, 700	${16 \atop 16}$	12'' 8''	$\bigg\}$ 1	27, 500	8	13″.5		

¹ Some of these are supposed to carry 14-inch guns.

Table VII—Continued.

DREADNOUGHT TYPE OF BATTLESHIPS, WITH CONTEMPORARIES OF OVER 18,000 TONS DISPLACEMENT, AND ARMORED CRUISERS OF INVINCIBLE TYPE—Continued.

RUSSIA.

		Built.			Buildir	ıg.		Number author-
	Num- ber.	Tons.	Guns.	Num- ber.	Tons.	G	uns.	ized up to January, 1911, but not yet building.
Battleships Armored cruisers.								
			ITAL	Y.				
BattleshipsArmored cruisers.) 1		1		
	'	-	AUSTI	RIA.				
Battleships Armored cruisers.			ł .		,			
	1 1		BRAZ	IL.	<u> </u>			
BattleshipsArmored cruisers.					,	1		
		A	RGENT	TINA.		,		
Battleships Armored cruisers.					56, 000	1		

Note.—Vessels under construction are all to be completed by end of 1914.

CHILE.

Bids for the construction of two battleships to be opened in April, 1911.

TABLE VIII.

BATTLESHIPS, ARMORED CRUISERS, AND CRUISERS (SCOUTS) OF THE FIVE PRINCIPAL NAVAL POWERS, LAUNCHED 1905-1910.

GREAT BRITAIN.

Year.	Bat- tle- ships.	Tonnage.	Arm- ored cruis- ers.	Tonnage.	Cruis- ers.	Tonnage.	Total.	Total fonnage.
1905	2	32, 700	4	54,200	1	2,895	7	89, 795
1906	3	50, 900	2	29, 200			5	80, 100
1907	3	55, 800	4	66, 350			7	122, 150
1908	2	38, 500			1.	3, 300	3	41,800
1909	2	39,150	1	18, 750	6	25,920	9	83, 820
1910	3	63, 000	1	26,350	4	18, 660	8	108, 010
Total	15	280, 050	12	194, 850	12	50, 775	39	525, 675
			GER	MANY.				
1905	2	25, 964	,		3	9, 750	5	35, 714
1906	2	25, 964	2	22, 832	2	6, 790	6	55, 58 6
1907					2	6, 988	2	6, 988
1908	4	74, 408	1	15, 550	2	7,824	7	97, 782
1909	3	64, 500	1	19,000	3	12,843	7	96, 343
1 910	1	21, 500	1	22, 000			2	43, 500
Total	12	212, 336	5	79, 382	12	44, 195	29	335, 913
		Ul	NITED	STATE	s.	I		
1905.	5	74,000	1	14, 500	1	9, 700	7	98, 200
1906.	1	16,000	2	29,000			3	45,000
1907.		_ = 5, 000			3	11, 250	3	11,250
1908.	3	52,000				11, 200	3	52, 000
1909	2	41, 825					2	41, 825
1 910	1	21, 825]	21, 825
Total	12	205, 650	3	43, 500	4	20, 950	19	270, 100

TABLE VIII—Continued.

BATTLESHIPS, ARMORED CRUISERS, AND CRUISERS (SCOUTS) OF THE FIVE PRINCIPAL NAVAL POWERS, LAUNCHED 1905-1910—Continued.

JAPAN.

Year.	Bat- tle- ships.	Tonnage.	Arm- ored cruis- ers.	Tonnage.	Cruis- ers.	Tonnage.	Total.	Total tonnage.
1905	2	32, 350	1	13, 750			3	46, 100
1906	1	19, 350	1	13, 750			2	33, 100
1907	1	19,800	2	29, 200	2	5, 380	5	54, 380
1908		,			1	1, 350	1	1, 350
1909								
1910	1	20, 800					1	20,800
Total	5	92, 300	4	56, 700	3	6, 730	12	155, 730
			FR	ANCE.				
1905	1	14, 636	1	12, 370			2	27, 006
1906			1	13, 428			1	13, 428
1907	1	14,636	1	13, 779			2	28, 415
1908			1	13, 779			1	13, 779
1909	5	90, 145		'			5	90, 145
1910	1	18, 029					1	18, 029
Total	8	137, 446	4	53, 356			12	190, 802
		4	RU	SSIA.				
1905								
1906	3	42,000	3	31,000			6	73,000
1907	1	16,600	1	8,000			2	24, 600
1908								
1909								
1910								
Total	4	58, 600	4	39,000			8	97, 600

BATTLESHIPS AND ARMORED CRUISERS RECENTLY COMPLETED OR APPROACHING COMPLETION.

TABLE IX.

BATTLESHIPS.

4 6		606	016	911		900		910	
Date of completion.		Feb., 1909	Mar., 1910	Jan., 1911	1911	Oct., 1909	1911	Apr., 1910	1911
Date launched.		July, 1907	Feb., 1909	Sept., 1909	Aug., 1910	Mar., 1908	June, 1910	Nov., 1908	Dec., 1909
Maxi- mum thickness armor belt.	Inches.	_	93	15	51	ಜ್ಞಕ ರಾ		=	=
Torpedo tubes.	,		33	£0	.s	9	9 {	67	<u>.</u>
Battery.	1	$\begin{cases} 10.12'' \\ 16.4'' \end{cases}$	$\left\{ \begin{array}{cc} 10.12'' \\ 20.4'' \end{array} \right.$	$ \begin{cases} 10.12'' \\ 16.4'' \end{cases} $	$ \begin{cases} 10 \ 13.5 \% \\ 20 \ 4 \% \end{cases} $	$\left\{\begin{array}{cc} 12.11'' \\ 12.6'' \end{array}\right.$	$\begin{cases} 12 & 12'' \\ 14 & 6'' \end{cases}$	$ \begin{cases} 10.12'' \\ 14.5'' \end{cases} $	$\left\{\begin{array}{cc} 10.12'' \\ 16.5'' \end{array}\right.$
Comple- ment.		800	800			950	086	940	950
Draft.	Feet.	27	27	27	() 	263	27	27	$28\frac{1}{2}$
Beam.	Feet.	85	84	85	88.	88	95	85	88
Length.	Feet.	490	200	510	545	452	515	510	510
Displace- ment.		18, 600	19, 250	19, 900	22, 500	18, 602	21, 500	20,000	21,825
De- signed speed.		21	21	16	23	61	13	23	203
		Bellerophon (Great Brit. ain).	Vanguard (Great Britain).	Neptune (Great Britain)	Orion (Great Britain)	Nassau (Gernaany)	Oldenburg (Germany)	North Dakota (United States).	Utah (United States)

TABLE IX—Continued.

BATTLESHIPS AND ARMORED CRUISERS RECENTLY COMPLETED OR APPROACHING COMPLETION—Continued.

BATTLESHIPS-Continued.

Date of comple- tion.			, 1908					Jan., 1910
Con ti			Jan.,	1911	1911			Jan.
Date launched.		Jan., 1911	May, 1907	Jan., 1909	Apr., 1907	Oct., 1910	Aug., 1910	Sept., 1908
Maximum thickness armor belt.	Inches.	11	11	9.8	6	6	6	တ
Torpedo tubes.		67	53	4	73	~~ 5	≈ ≈	:
Battery.		$\left\{\begin{array}{ccc} 12 & 12'' \\ 21 & 5'' \end{array}\right.$	$\left\{ \begin{array}{cc} 4 \ 12^{\prime\prime} \\ 10 \ 7.6^{\prime\prime} \end{array} \right.$	$\left\{ \begin{array}{cc} 4 \ 12'' \\ 12 \ 9.5'' \end{array} \right.$	$\left\{ \begin{array}{cc} 4 \ 12'' \\ 12 \ 10'' \end{array} \right.$	$\left\{\begin{array}{cc} 12\ 12'' \\ 10\ 6'' \end{array}\right.$	$\left\{\begin{array}{cc} 12\ 12'' \\ 20\ 4.7'' \end{array}\right.$	$\left\{\begin{array}{cc} 12\ 12'' \\ 22\ 4.7'' \end{array}\right.$
Comple- ment.		1,040	268	089	932	1,000	1, 030	
Draft.	Feet.	$28\frac{1}{2}$	$26\frac{1}{2}$	273	273	273	$27\frac{1}{2}$	25
Beam.	Feet.	93	$79\frac{1}{2}$	84	84	84	28	84
Length.	Feet.	554	439	476	460	200	520	200
Displace- ment.		26,000	14, 636	18,029	19,800	20,800	18,600	19, 250
De- signed. speed.		$20\frac{1}{2}$	81	194	50	203	23	23
		Arkansas (United States).	Vérité (France)	Voltaire (France)	Aki (Japan)	Kawachi (Japan)	Dante Alighieri (Italy)	Minas Geraes (Brazil)

BATTLESHIPS AND ARMORED CRUISERS RECENTLY COMPLETED OR APPROACHING COMPLETION—Continued. Table IX—Continued.

ARMORED CRUISERS.

Indomitable (Great Britann).	25	17, 250	530	781	26	750	$\left\{\begin{array}{c} 812^{\prime\prime} \\ 164^{\prime\prime} \end{array}\right\}$	70	7	Mar., 1907	June, 1908
Indefatigable (Great Britain.)	25	18,750	555	80	263	760	$\left\{\begin{array}{c} 812^{\prime\prime} \\ 164^{\prime\prime} \end{array}\right\}$	67	7	Oct., 1909	Feb., 1911
Lion (Great Britain)	29	26, 350	099	881	273		$\left\{\begin{array}{c} 8 \ 13.5'' \\ 16 \ 4'' \end{array}\right\}$	ବୀ	6	Aug., 1910	1911
Waldeck Rousseau (France).	53	13, 779	515	$70\frac{1}{2}$	27	740	14 7.6"	श	1-	Mar., 1908	1911
Blücher (Germany)	24	15, 550	499	80	$26\frac{1}{2}$	820	$ \left\{ \begin{array}{ccc} 12 & 8.3'' \\ 8 & 6'' \end{array} \right\} $	4	7	Apr., 1908	Oct., 1909
Von der Tann (Germany).	26	19,000	561	87	27	006	$\left\{\begin{array}{c} 8\ 11'' \\ 10\ 6'' \end{array}\right\}$	4	7	Mar., 1909	Sept., 1910
Moltke (Germany)	56	22,000	290	06	27	,	$\left\{\begin{array}{c} 8\ 12'' \\ 12\ 6'' \end{array}\right\}$	4	10	Apr., 1910	1911
Kurama (Japan)	22	14,600	450	753	26	850	$\left\{\begin{array}{c} 412^{\prime\prime} \\ 88^{\prime\prime} \end{array}\right\}$	භ	~	Oct., 1907	1911
Montana (United States)	22	14, 500	502	73	25	950	$\left\{\begin{array}{c} 4\ 10'' \\ 16\ 6'' \end{array}\right\}$	4	ಸರ	Dec., 1906	July, 1908

TABLE X.

TIME REQUIRED TO BUILD SOME RECENT BATTLESHIPS OF THE FIVE PRINCIPAL NAVAL POWERS.

GREAT BRITAIN.

Names.	Ton- nage.	Date of contract or order.	Keel laid.	Launched.	Commissioned.
Bellerophon	18,600	¹ Sept., 1906	Dec., 1906	July, 1907	Feb., 1909
Superb	18,600	Dec., 1906	Feb., 1907	Nov. 1907	May, 1909
Collingwood	19, 250	¹ Oct. 1907	Feb., 1908	Nov. 1908	Apr., 1910
Vanguard	19, 250	Mar., 1908	Apr., 1908	Feb., 1909	Mar., 1910
Neptune	19, 900	¹ Nov., 1908	Jan., 1909	Sept., 1909	Jan., 1911
		GERMAN	Y.		
Nassau	18, 602	¹ May, 1906	Aug., 1907	Mar., 1908	Oct., 1909
Westfalen	18, 602	Oct., 1906	Aug., 1907	July, 1908	Nov., 1909
Posen	18,602	Apr., 1907	July, 1907	Dec., 1908	May, 1910
Rheinland	18, 602	Apr., 1907	July, 1907	Sept., 1908	Apr., 1910
	Ţ	UNITED ST	ATES.		
South Carolina	16,000	July, 1906	Dec., 1906	July, 1908	Mar., 1910
Michigan	16,000	July, 1906	Dec., 1906	May, 1908	Jan., 1910
Delaware	20,000	Aug., 1907	Nov., 1907	Feb., 1909	Apr., 1910
North Dakota	20,000	Aug., 1907	Dec., 1907	Nov., 1908	Apr., 1910
		FRANCI	E.		
Vérité	14, 636	May, 1902	1903	May, 1907	Jan., 1908
Voltaire	18, 029	Dec., 1906	June, 1907	Jan., 1909	1911
Danton	18,029	¹ May, 1906	Jan., 1908	July, 1909	Feb., 1911
		JAPAN	•		
Satsuma	19, 350	¹ 1904	May, 1905	Nov., 1906	Apr., 1910
Aki	19,800	¹ 1905	Mar., 1906	Apr., 1907	² Mar., 1911
1 Duilt in C		t doolerranda	2 Trials in Door	ombor 1010	

¹ Built in Government dockyards. ² Trials in December, 1910.

Table XI.

BATTLESHIPS AND ARMORED CRUISERS 1 AUTHORIZED, 1906-1910.

Constant	19	006	19	07	19	08	19	09	19	10
Country.	B. S.	A.C.1								
Great Britain	3		3		1	1	6	2 4	4	1
Germany	2	3 1	2	1	3	1	3	1	3	1
United States	1		1		2		2		2	
Japan	(4)		2	2						1
France	6								2	

¹ Armored cruisers able to take position in line of battle.

TABLE XII.

NAVAL EXPENDITURES.

Year.	England.	Germany.	United States.	Japan.	France.
1906	\$167, 525, 238	\$58, 405, 200	\$104, 508, 719	\$19, 231, 945	\$60, 025, 405
1 907	159, 758, 177	69, 210, 400	99, 693, 298	41, 076, 145	57, 394, 167
1908	160, 074, 573	80, 229, 800	129, 972, 971	40, 312, 533	58, 941, 096
1909	¹ 167, 780, 705	² 97, 722, 800	136, 935, 199	35, 870, 061	61, 064, 096
1 910			131, 404, 640	37, 542, 184	69, 031, 276

Estimated.

² Includes two authorized by colonies.

³ The Blucher of 15,550 tons.

⁴ Since the Russo-Japanese War Japan has remodeled and placed in service the Russian prizes, which are now named: Battleships, Tango, Sagami, Suwo, Hizen, and Iwami; coast-defense vessels, Iki, Mishima, and Okinoshima, and armored cruiser Aso.

² Authorized.

SHIPBUILDING PROGRAMS.

GERMANY.

Year.	Battle- ships.	Armored cruisers.	Small cruisers.
1908	3	1	2
1909	3	1	2
1910	3	1	2
1911	3	1	2
1912	1	1.	2
1913	1	1	2
1914	1	1	2
1915	1	1	2
1916	1	1	2
1917	1	1	2

In addition to this program Germany annually provides for 12 torpedo-boat destroyers and a number of submarines. Her object is to increase, by the year 1917, her total strength to 38 battleships, 20 armored eruisers, 38 small cruisers—all to be less than 20 years old—and 144 torpedo craft.

GREAT BRITAIN.

Great Britain has no fixed program, but her policy is to maintain the two-power standard, viz, a preponderance of 10 per cent over the combined strengths of the navies of the two next strongest naval powers.

UNITED STATES.

United States has no fixed program.

FRANCE.

France has no fixed program.

JAPAN.

Japan usually provides for a shipbuilding program which extends over a period of years. Four programs are now in existence and another has been authorized by the Diet.

BRAZIL.

In December, 1904, Brazil provided for a shipbuilding program, which has since been modified (put into execution in 1907) and now includes—

3 battleships.

2 scout cruisers.

10 torpedo-boat destroyers.

All of the above vessels except one battleship have been completed and delivered to Brazil.

ARGENTINA.

Argentina has provided for a program of 2 large battleships and 12 destroyers, and authorized increasing the program, if required, to 3 large battleships and 16 destroyers.

SPAIN.

Spain, in 1908, provided a program for the upbuilding of her navy, as follows:

101	is, each.
3 battleships of about	15,000
3 torpedo-boat destroyers	350
24 torpedo boats	180
4 gunboats of about	1,000

AUSTRIA.

Austria has adopted a program extending to the year 1917.

ITALY.

Four battleships are being built at present and it is reported that 4 more are contemplated.

SHIPBUILDING PROGRAMS, 1911-1912.

[Authorized up to April, 1911.]

GREAT BRITAIN.

5 large armored ships (4 battleships, 1 bat6 submarines.

tleship cruiser).

3 protected cruisers.

1 unarmored cruiser. 20 destroyers.

2 river gunboats.

1 depot ship for destroyers.

1 hospital ship.

GERMANY.

3 battleships.

1 battleship cruiser.
2 protected cruisers.

12 destroyers.

\$3,570,000 for submarines. 3 surveying steamers.

UNITED STATES.

2 battleships.

8 destroyers.
4 submarines.
2 fleet colliers.

1 gunboat.
1 river gunboat.

1 submarine tender.

FRANCE.

2 battleships.

JAPAN.

A new program has been authorized which contemplates expenditure of \$40,000,000 in six years to increase the displacements of 1 battleship and 3 battleship cruisers already authorized, and to build in addition 1 battleship and 1 battleship cruiser.

AUSTRIA.

The following program, to be completed by 1916, has been authorized:

4 battleships (including 2 now under con-

struction).
3 scout cruisers.

6 destroyers.
12 torpedo boats.

6 submarines.

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REFERENCE BOOKS.

PROBABLY MAY BE FOUND IN A PUBLIC LIBRARY.

Navy Yearbook (Pulsifer).—Giving annual appropriations and various acts relating to the Navy, beginning 1883; alphabetical list of all United States vessels, with data on same; list of vessels of the principal navies of the world, etc. Printed as a congressional document.

Fighting ships (Jane).—Giving a detail description of all fighting ships and showing silhouettes, plans, and elevations of ships, description of uniforms, lists of naval bases, etc.

The Naval Pocketbook (Clowes).—Giving detail description of individual ships, lists, and numbers, data concerning guns, etc.

The Naval Annual (Brassey).—Giving a series of essays on the navies of the world, lists, and numbers, and plan and elevation of principal ships.

For recommendations to Congress and reports of the various bureaus, see annual reports of the Secretary of the Navy.

The tables of "War-ship tonnage" and "Sea strength" (Tables I to V, ante) of the principal naval powers are published annually by the Office of Naval Intelligence.

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